

Claims

## 1. A gaming system comprising:

at least one player station capable of displaying to a player a simulation of  
at least one game of chance;

a primary random event generator communicable with the at least one  
player station by means of a communication network, the primary random  
event generator being responsive to a request from the at least one player  
station to generate one or more random events upon which an outcome of  
the at least one game of chance is based;

a secondary random event generator communicable with the at least one  
player station, the secondary random event generator being activatable by  
the at least one player station to generate, in response to a request from  
the at least one player station, one or more random events upon which an  
outcome of the at least one game of chance is based; and

a controller arranged to monitor a status of the primary random event  
generator, the status of the primary random event generator being an  
active status when the primary random event generator generates one or  
more random events in response to a request from the at least one player  
station, and a failed status when the primary random event generator fails  
to generate one or more random events in response to a request from the  
at least one player station, the controller being arranged to automatically  
activate the secondary random event generator upon transition of the  
status of the primary random event generator from an active status to a  
failed status.

2. A gaming system as claimed in claim 1 in which the secondary random  
event generator is communicable with the at least one player station by  
means of the same communication network.3. A gaming system as claimed in either one of claims 1 or 2 in which the  
secondary random event generator has a status that is switchable

between an inactive state when the status of the primary random event generator is active, and an active state when secondary random event generator is activated by the controller,

- 5        4. A gaming system as claimed in claim 3 in which the primary and secondary random event generators are software random number generators.
- 10       5. A gaming system as claimed claim 4 in which the primary software random number generator is executable in a first gaming server remote from the at least one player station.
- 15       6. A gaming system as claimed in claim 5 in which the secondary software random event generator is executable in a secondary gaming server remote from the at least one player station.
- 20       7. A gaming system as claimed in claim 6 which includes a watchdog facility that detects failure of either one of the primary random number generator and the primary gaming server.
- 25       8. A gaming system as claimed in claim 7 in which the watchdog facility transmits a request data packet to the primary gaming server at regular intervals and monitors each request data packet for a corresponding response from the primary gaming server within a predetermined time interval.
- 30       9. A gaming system as claimed in claim 8 in which the watchdog facility instructs the controller to switch the status of the primary random event generator from the active state to the failed state when any request data packet from the watchdog facility does not receive a corresponding response from the primary gaming server within the predetermined time period.

10. A gaming system as claimed in claim 1 in which the at least one player station directs any request for generation of the one or more random events to the secondary random event generator when the status of the primary random event generator is a failed status.

11. A gaming system as claimed in claim 1 in which the at least one player station is a computer workstation and the communication network is the Internet.

12. A gaming system as claimed in claim 7 in which the watchdog facility is a watchdog timer program executable in the at least one player station.

13. A gaming system as claimed in claim 1 in which the primary and secondary servers are communicable with each other by means of the communication network.

14. A gaming system as claimed in claim 1 in which the primary and secondary gaming servers each have a corresponding storage memory and synchronise data in their respective storage memories at predetermined intervals.

15. A gaming system as claimed in claim 7 in which the secondary gaming server generates any one or both an audible and a visual alarm when the watchdog facility detects failure of the primary gaming server.

16. A method of operation of a gaming system, comprising the steps of: displaying to a player a simulation of at least one game of chance; requesting a primary random event generator to generate one or more random events upon which an outcome of the at least one game of chance is based;

monitoring a status of the primary random event generator, the status of the primary random event generator being an active status when the primary random event generator generates one or more random events in response to a request, and a failed status when the primary random event generator fails to generate one or more random events in response to a request; and

automatically activating a secondary random event generator, upon transition of the status of the primary random event generator from an active status to a failed status, to generate, in response to a request, one or more random events upon which an outcome of the at least one game of chance is based.

17. A method as claimed in claim 16 that includes a step of switching a status of the secondary random event generator between an inactive state when the status of the primary random event generator is active, and an active state when secondary random event generator has been automatically activated.

18. A method as claimed in either one of claims 16 or 17 in which the one or more random events upon which an outcome of the at least one game of chance is based are generated by means of primary and secondary software random number generators.

19. A method as claimed in claim 18 in which the primary software random number generator is executed in a first gaming server and the secondary software random event generator is executed in a secondary gaming server.

20. A method as claimed in claim 19 that includes a step of detecting failure of either one of the primary random number generator and the primary gaming server by means of a watchdog facility.

21. A method as claimed in claim 20 in which a request data packet is transmitted from the watchdog facility to the primary gaming server at regular intervals and monitored for a corresponding response from the primary gaming server within a predetermined time interval.

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22. A method as claimed in claim 21 in which the status of the primary random event generator is switched from the active state to the failed state when any request data packet from the watchdog facility does not receive a corresponding response from the primary random event generator within the predetermined time period.

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23. A method as claimed in claim 16 in which any request for generation of the one or more random events is directed to the secondary random event generator when the status of the primary random event generator is a failed status.

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24. A method as claimed in any one of claims 16 to 23 that includes a step of synchronising, at predetermined intervals, data in storage memories associated with the primary and secondary gaming servers, respectively.

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25. A method as claimed in claim 22 in which any one or both an audible and a visual alarm are generated when failure of the primary gaming server has been detected.

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